The Math Learning Center Bridges in Mathematics, Grades K-2

Degree of Evidence regarding the Standards for Mathematical Practice:

Moderate Evidence

Summary of evidence:

- 1. Make sense of problems and persevere in solving them. There is moderate evidence of this practice throughout this series. Many examples were found of students making sense of problems by using multiple representations, create a plan, check, and compare answers. This is a particular strength and focus of this resource. The use of open-ended questions is underdeveloped.
- 2. **Reason abstractly and quantitatively**. There is minimal evidence to support this practice throughout this resource. This resource lacks opportunities for students to apply the notion of properties and reasonableness of their results.
- 3. Construct viable arguments and critique the reasoning of others. There is limited evidence found of this practice throughout the series. Although reviewers found many examples of students sharing and justifying their thinking and critiquing solutions of others, no evidence was found for using non-examples throughout this resource.
- 4. **Model with mathematics.** There was moderate evidence found for this practice, and it is a particular strength in this resource. This resource is strongly rooted in real-world situations and examples. However, the evidence was found to be inconsistent for the creation and use of mathematical models. In Kindergarten and Grade 1 there are numerous examples of students being encouraged to use mathematical models and to create their own. In the Grade 2 materials there is some evidence of various models/tools being used, but no evidence was found for students creating and/or revising mathematical models.
- 5. **Use appropriate tools strategically.** There is limited evidence for this practice. Students have many opportunities for using tools, but there is only limited evidence for students choosing tools to problem solve. No evidence was found to support students realizing the strengths and limitations of tools.
- 6. **Attend to precision.** There was limited evidence found to support development of this practice throughout the sampled materials. Reviewers did find evidence of teacher modeling the use of precise communication. For example, the teacher guide notes suggests the teacher say, "...I am going to use vertical notation. That means...?". Appropriate vocabulary was found in many lessons. There was no evidence cited for the use of proper notation.
- 7. Look for and make use of structure. There is minimal evidence of this practice throughout this series. There was some evidence found to identify patterns and structure, but this practice is underdeveloped throughout this grade span.
- 8. Look for and express regularity in repeated reasoning. There is minimal evidence of this practice in the sampled sections of this series. There are very few opportunities provided for learners to look for and express regularity in repeated reasoning.